

CLIPPEDIMAGE= JP405335536A

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TITLE: IMAGING DEVICE

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INVENTOR-INFORMATION:

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N/A

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ABSTRACT:

PURPOSE: To contrive to miniaturize the size of an image chip by a method wherein bonding pads are arranged parallel and a projection is not provided in the opposite angle between the bonding pads.

CONSTITUTION: As a diameter of at least about 80 is required in pads 10, 12, the pads 10, 12 are arranged parallel. A clearance 13 of a light-emitting part 4 and a pad 12 is 25 $\mu$ m and 15 $\mu$ m shorter than usual, and a diameter of the pads 10, 12 is 110 $\mu$ m with a circle. Further, the minimum interval 15 between the pads 10, 12 in the opposite angle direction is 20 $\mu$ m the same as usual. But, as the pad is circular, a length between centers of the pads in

the vertical direction is  $92\mu\text{m}$  ( $130$  is divided by  $1.414$ ), and as compared with conventional  $130\mu\text{m}$ , it is shortened by  $38\mu\text{m}$ . Also, a clearance  $17$  of the pad  $10$  and a chip  $2$  is changed from  $30\mu\text{m}$  to  $25\mu\text{m}$ , namely shortened by  $5\mu\text{m}$ . A total reduction width of a length  $1$  of the chip  $2$  is  $73\mu\text{m}$ . As the reduction in the longitudinal direction of the chip  $2$  cannot be made, an area of the chip  $2$  can be reduced by  $18\%$ .

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